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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,727	07/21/2003	Klaus Fruh	49321-89	1684

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EXAMINER

HUYNH, PHUONG N

ART UNIT	PAPER NUMBER
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1644

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,727

Applicant(s)

FRUH ET AL.

Examiner

Phuong Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE One MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/21/03.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-27 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

I. Claims 1-27 are pending.

Election/Restrictions

II. Restriction to one of the following inventions is required under 35 U.S.C. 121:

1. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-I protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
2. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-II protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
3. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-III protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
4. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-IV protein antibody** or epitope-binding fragments thereof or pharmaceutical composition

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comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.

5. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-V protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
6. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VI protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
7. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
8. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VIII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.

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9. Claims 2-3, 5-6, 24-25, and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 38**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
10. Claims 2-3, 5-6, 24-25, and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 40**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
11. Claims 2-3, 5-6, 24-25, and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 42**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
12. Claims 2-3, 5-6, 24-25, and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 44**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
13. Claims 2-3, 5-6, 24-25, and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a**

sequence of SEQ ID NO: 46, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.

14. Claims 2-3, 5-6, 24-25, and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 48**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
15. Claims 2-3, 5-6, 24-25, and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 50**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
16. Claims 2-3, 5-6, 24-25, and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 52**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
17. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 39 and 54**, or pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.

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18. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 41, and 55**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
19. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 43 and 56**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
20. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 45 and 57**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
21. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 47 and 58**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
22. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 49 and 59**, a pharmaceutical

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composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.

23. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 51 and 60**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
24. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 53 and 61**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
25. Claims 2, 5-6, 24 and 27 drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **a specific small molecule of MARH inhibitor of MARCH-protein-mediated ubiquination other than antibody, polypeptide or antisense**, and pharmaceutical composition comprising said small molecule, classified in Class 530, subclass 350; Class 424, subclass 184.1.
26. Claims 2, 5-6, 24 and 27 drawn to a **method of treating** or preventing a specific condition wherein the condition is **leukemia or a specific cancer** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **a specific combination of MARCH-specific antagonist**, a pharmaceutical composition comprising said combination, classified in Class 530, subclass 350; Class 424, subclass 184.1.
27. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-

protein antagonist, a MARCH protein antagonist is **anti-MARCH-I protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.

28. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-II protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
29. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-III protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
30. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-IV protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
31. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-V protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
32. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VI protein antibody**

or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.

33. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
34. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VIII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
35. Claims 2-3, 5-6, 24-25 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 38**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
36. Claims 2-3, 5-6, 24-25 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 40**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
37. Claims 2-3, 5-6, 24-25 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-

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protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 42**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.

38. Claims 2-3, 5-6, 24-25 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 44**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
39. Claims 2-3, 5-6, 24-25 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 46**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
40. Claims 2-3, 5-6, 24-25 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 48**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
41. Claims 2-3, 5-6, 24-25 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 50**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.

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42. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 52**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
43. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 39 and 54**, or pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
44. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 41, and 55**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
45. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 43 and 56**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
46. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 45 and 57**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.

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47. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 47 and 58**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
48. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 49 and 59**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
49. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 51 and 60**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
50. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 53 and 61**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
51. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **a specific small molecule of MARH inhibitor of MARCH-protein-mediated ubiquination other than antibody, polypeptide or anti-sense oligonucleotide**, or pharmaceutical composition comprising said small molecule, classified in Class 530, subclass 350; Class 424, subclass 184.1.

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52. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **mental retardation** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **a specific combination of MARCH-specific antagonist**, a pharmaceutical composition comprising said combination, classified in Class 530, subclass 350; Class 424, subclass 184.1.
53. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-I protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
54. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-II protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
55. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-III protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
56. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-IV protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
57. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein

antagonist, a MARCH protein antagonist is **anti-MARCH-V protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.

58. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VI protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
59. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
60. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VIII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
61. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 38**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
62. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide**

comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 40, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.

63. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 42**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
64. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 44**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
65. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 46**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
66. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 48**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.

67. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 50**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
68. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 52**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
69. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 39 and 54**, or pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
70. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 41, and 55**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
71. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 43 and 56**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.

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72. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 45 and 57**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
73. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 47 and 58**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
74. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 49 and 59**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
75. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 51 and 60**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
76. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 53 and 61**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
77. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein

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antagonist, a MARCH protein antagonist is **a specific small molecule of MARCH inhibitor of MARCH-protein-mediated ubiquitination other than antibody, polypeptide or antisense oligonucleotide**, and pharmaceutical composition comprising said small molecule, classified in Class 530, subclass 350; Class 424, subclass 184.1.

78. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **thalassemia** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **a specific combination of MARCH-specific antagonist**, a pharmaceutical composition comprising said combination, classified in Class 530, subclass 350; Class 424, subclass 184.1.
79. Claims 2, 5-6, 24 and 27, drawn to a method of treating or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-I protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
80. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-II protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
81. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-III protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.

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82. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-IV protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
83. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-V protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
84. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VI protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
85. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
86. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VIII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition

comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.

87. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 38**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
88. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 40**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
89. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 42**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
90. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 44**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.

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91. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 46**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
92. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 48**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
93. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 50**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
94. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 52**, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
95. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 39 and 54**, or pharmaceutical

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composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.

96. Claims 2, 4-6, 24, 26 and 27, drawn to a method of treating or preventing a specific condition wherein the condition is a **specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 41, and 55**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
97. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is a **specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 43 and 56**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
98. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is a **specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 45 and 57**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
99. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is a **specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 47 and 58**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.

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100. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 49 and 59**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
101. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 51 and 60**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
102. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 53 and 61**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
103. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **a specific small molecule of MARH inhibitor of MARCH-protein-mediated ubiquination other than antibody, polypeptide or antisense oligonucleotide**, or pharmaceutical composition comprising said small molecule, classified in Class 530, subclass 350; Class 424, subclass 184.1.
104. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific autoimmune disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **a specific combination of**

MARCH-specific antagonist, a pharmaceutical composition comprising said combination, classified in Class 530, subclass 350; Class 424, subclass 184.1.

105. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-I protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
106. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-II protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
107. Claims 1-2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-III protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
108. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-IV protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.

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109. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-V protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
110. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VI protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
111. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
112. Claims 2, 5-6, 24 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **anti-MARCH-VIII protein antibody** or epitope-binding fragments thereof or pharmaceutical composition comprising said antibody, classified in Class 530, subclass 387.1; Class 424, subclass 130.1.
113. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a**

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sequence of SEQ ID NO: 38, or pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.

114. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 40**, and a pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
115. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 42**, and a pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
116. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 44**, and a pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
117. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 46**, and a pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.

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118. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 48**, and a pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
119. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 50**, and a pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
120. Claims 2-3, 5-6, 24-25 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific antisense oligonucleotide comprises a sequence of at least 12 contiguous nucleotides of a sequence of SEQ ID NO: 52**, and a pharmaceutical composition comprising said antisense oligonucleotide, classified in Class 536, subclass 24.5.
121. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 39 and 54**, and a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
122. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 41, and 55**, and a

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pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.

123. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 43 and 56**, and a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
124. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 45 and 57**, a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
125. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 47 and 58**, and a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
126. Claims 2, 4-6, 24, 26 and 27, drawn to **a method of treating** or preventing a specific condition wherein the condition is **a specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 49 and 59**, and a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.

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127. Claims 2, 4-6, 24, 26 and 27, drawn to a method of treating or preventing a specific condition wherein the condition is a **specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 51 and 60**, and a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
128. Claims 2, 4-6, 24, 26 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is a **specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is **MACH-specific polypeptide or protein corresponding to SEQ ID NO: 53 and 61**, and a pharmaceutical composition comprising said protein, classified in Class 530, subclass 350; Class 424, subclass 184.1.
129. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is a **specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is a **specific small molecule of MARH inhibitor of MARCH-protein-mediated ubiquination other than antibody, polypeptide or antisense oligonucleotide**, and a pharmaceutical composition comprising said small molecule, classified in Class 530, subclass 350; Class 424, subclass 184.1.
130. Claims 2, 5-6, 24 and 27, drawn to a **method of treating** or preventing a specific condition wherein the condition is a **specific neurological disease** by administering a MARCH-protein antagonist, a MARCH protein antagonist is a **specific combination of MARCH-specific antagonist**, a pharmaceutical composition comprising said combination, classified in Class 530, subclass 350; Class 424, subclass 184.1.
131. Claims 8-11, drawn to a **method for identifying** test compounds by (a) contacting a test compound with a specific MARCH-protein target/receptor and a functional MARCH-protein wherein at least one of protein bears a detectable label; (b) assaying any resulting MARCH-protein target/receptor:MARCH-protein complex for the present of the label and (c) determining whether the test compound antagonizes binding of the MARCH-

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protein target/receptor to the MARCH- protein, wherein the **MARH-protein is MARCH-1**, corresponding to SEQ ID NO: 39 and 54, classified in Class 435, subclass 7.93.

132. Claims 8-11, drawn to **a method for identifying** test compounds by (a) contacting a test compound with a specific MARCH-protein target/receptor and a functional MARCH-protein wherein at least one of protein bears a detectable label; (b) assaying any resulting MARCH-protein target/receptor:MARCH-protein complex for the present of the label and (c) determining whether the test compound antagonizes binding of the MARCH-protein target/receptor to the MARCH- protein, wherein the **MARH-protein is MARCH-II**, corresponding to SEQ ID NO: 41 and 55, classified in Class 435, subclass 7.93.
133. Claims 8-11, drawn to **a method for identifying** test compounds by (a) contacting a test compound with a specific MARCH-protein target/receptor and a functional MARCH-protein wherein at least one of protein bears a detectable label; (b) assaying any resulting MARCH-protein target/receptor:MARCH-protein complex for the present of the label and (c) determining whether the test compound antagonizes binding of the MARCH-protein target/receptor to the MARCH- protein, wherein the **MARH-protein is MARCH-III**, corresponding to SEQ ID NO: 43 and 56, classified in Class 435, subclass 7.93.
134. Claims 8-11, drawn to **a method for identifying** test compounds by (a) contacting a test compound with a specific MARCH-protein target/receptor and a functional MARCH-protein wherein at least one of protein bears a detectable label; (b) assaying any resulting MARCH-protein target/receptor:MARCH-protein complex for the present of the label and (c) determining whether the test compound antagonizes binding of the MARCH-protein target/receptor to the MARCH- protein, wherein the **MARH-protein is MARCH-IV**, corresponding to SEQ ID NO: 45 and 57, classified in Class 435, subclass 7.93.

135. Claims 8-11, drawn to **a method for identifying** test compounds by (a) contacting a test compound with a specific MARCH-protein target/receptor and a functional MARCH-protein wherein at least one of protein bears a detectable label; (b) assaying any resulting MARCH-protein target/receptor:MARCH-protein complex for the present of the label and (c) determining whether the test compound antagonizes binding of the MARCH-protein target/receptor to the MARCH- protein, wherein the **MARH-protein is MARCH-V**, corresponding to SEQ ID NO: 47 and 58, classified in Class 435, subclass 7.93.
136. Claims 8-11, drawn to **a method for identifying** test compounds by (a) contacting a test compound with a specific MARCH-protein target/receptor and a functional MARCH-protein wherein at least one of protein bears a detectable label; (b) assaying any resulting MARCH-protein target/receptor:MARCH-protein complex for the present of the label and (c) determining whether the test compound antagonizes binding of the MARCH-protein target/receptor to the MARCH- protein, wherein the **MARH-protein is MARCH-VI**, corresponding to SEQ ID NO: 49 and 59, classified in Class 435, subclass 7.93.
137. Claims 8-11, drawn to **a method for identifying** test compounds by (a) contacting a test compound with a specific MARCH-protein target/receptor and a functional MARCH-protein wherein at least one of protein bears a detectable label; (b) assaying any resulting MARCH-protein target/receptor:MARCH-protein complex for the present of the label and (c) determining whether the test compound antagonizes binding of the MARCH-protein target/receptor to the MARCH- protein, wherein the **MARH-protein is MARCH-VII**, corresponding to SEQ ID NO: 51 and 60, classified in Class 435, subclass 7.93.
138. Claims 8-11, drawn to **a method for identifying** test compounds by (a) contacting a test compound with a specific MARCH-protein target/receptor and a functional MARCH-protein wherein at least one of protein bears a detectable label; (b) assaying any resulting MARCH-protein target/receptor:MARCH-protein complex for the present of the label and (c) determining whether the test compound antagonizes binding of the MARCH-

protein target/receptor to the MARCH- protein, wherein the **MARH-protein is MARCH-VIII**, corresponding to SEQ ID NO: 53 and 61, classified in Class 435, subclass 7.93.

139. Claims 12-15, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes **protein-mediated ubiquination activity**, classified in Class 435, subclass 7.7.
140. Claims 12-17, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes **MARCH-protein-mediated receptor endocytosis or receptor up or down regulation assays, and vesicle trafficking**, classified in Class 435, subclass 7.21.
141. Claims 12-15, 17, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes **cell motility assays**, classified in Class 435, subclass 7.24.
142. Claims 12-15, 17, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes cell **growth rate assays**, classified in Class 435, subclass 7.23.
143. Claims 12-16, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes **apoptosis assays, or cellular death**, classified in Class 435, subclass 7.7.
144. Claims 12-16, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor

and a MARCH-protein and (b) determining whether the test compound antagonizes MARCH-protein-mediated or MARCH-protein target/receptor mediated **signal transduction assays, phosphorylation assays**, or activation of intracellular protein, classified in Class 435, subclass 21.

145. Claims 12-16, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes **organization of actin cytoskeleton**, classified in Class 435, subclass 7.3.
146. Claims 12-16, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes **gene transcription**, classified in Class 435, subclass 6.
147. Claims 12-16, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes **lipid metabolism**, classified in Class 435, subclass 4.
148. Claims 12-16, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes **cellular transformation**, classified in Class 435, subclass 7.23.
149. Claims 12-16, drawn to a method for identifying test compounds by (a) contacting a test compound with a cell expressing a specific functional MARCH-protein target/receptor and a MARCH-protein and (b) determining whether the test compound antagonizes **a specific combination of measurement of cellular processes**, classified in Class 435, subclass 7.21.

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150. Claim 19, drawn to a **pharmaceutical composition** comprising an antagonist of MARCH-protein and a pharmaceutically acceptable carrier, a specific MARCH-protein antagonist is a MARCH-specific antisense oligonucleotide comprising at least 12 contiguous nucleotides of a sequence of **SEQ ID NO: 38** and complements thereof, classified in Class 536, subclass 24.5.
151. Claim 19, drawn to a **pharmaceutical composition** comprising an antagonist of MARCH-protein and a pharmaceutically acceptable carrier, a specific MARCH-protein antagonist is a MARCH-specific antisense oligonucleotide comprising at least 12 contiguous nucleotides of a sequence of **SEQ ID NO: 39** and complements thereof, classified in Class 536, subclass 24.5.
152. Claim 19, drawn to a **pharmaceutical composition** comprising an antagonist of MARCH-protein and a pharmaceutically acceptable carrier, a specific MARCH-protein antagonist is a MARCH-specific antisense oligonucleotide comprising at least 12 contiguous nucleotides of a sequence of **SEQ ID NO: 40** and complements thereof, classified in Class 536, subclass 24.5.
153. Claim 19, drawn to a **pharmaceutical composition** comprising an antagonist of MARCH-protein and a pharmaceutically acceptable carrier, a specific MARCH-protein antagonist is a MARCH-specific antisense oligonucleotide comprising at least 12 contiguous nucleotides of a sequence of **SEQ ID NO: 41** and complements thereof, classified in Class 536, subclass 24.5.
154. Claim 19, drawn to a **pharmaceutical composition** comprising an antagonist of MARCH-protein and a pharmaceutically acceptable carrier, a specific MARCH-protein antagonist is a MARCH-specific antisense oligonucleotide comprising at least 12 contiguous nucleotides of a sequence of **SEQ ID NO: 42** and complements thereof, classified in Class 536, subclass 24.5.
155. Claim 19, drawn to a **pharmaceutical composition** comprising an antagonist of MARCH-protein and a pharmaceutically acceptable carrier, a specific MARCH-protein

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antagonist is a MARCH-specific antisense oligonucleotide comprising at least 12 contiguous nucleotides of a sequence of **SEQ ID NO: 43** and complements thereof, classified in Class 536, subclass 24.5.

156. Claim 19, drawn to a **pharmaceutical composition** comprising an antagonist of MARCH-protein and a pharmaceutically acceptable carrier, a specific MARCH-protein antagonist is a MARCH-specific antisense oligonucleotide comprising at least 12 contiguous nucleotides of a sequence of **SEQ ID NO: 44** and complements thereof, classified in Class 536, subclass 24.5.
157. Claim 19, drawn to a **pharmaceutical composition** comprising an antagonist of MARCH-protein and a pharmaceutically acceptable carrier, a specific MARCH-protein antagonist is a MARCH-specific antisense oligonucleotide comprising at least 12 contiguous nucleotides of a sequence of **SEQ ID NO: 45** and complements thereof, classified in Class 536, subclass 24.5.
158. Claims 20-22, drawn to a **pharmaceutical composition** comprising an antagonist of MARCH-protein and a pharmaceutically acceptable carrier, a **MARCH-protein specific antibody**, classified in Class 424, subclass 130.1; Class 530, 387.1.

Linking claims 1 and 123 will be examined along with Groups 1-130 if any one of said Groups is elected.

Linking claim 7 will be examined along with Groups 131-138 if any one of said Groups is elected.

Linking claim 18 will be examined along with Groups 150-158 if any one of said Groups is elected.

Claims 1 and 123 link inventions 1-130. Claim 7 links inventions 131-138. Claim 18 links inventions 143-151. The restriction requirement among the linked inventions is subject to the nonallowance of the linking claim(s), claims 1, 7, 123 and 18. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking

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claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups 150-158 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the products as claimed such as antisense oligonucleotide to a specific MARCH-protein versus antibody differ with respect to its structure, biochemical properties, binding specificity and function. Therefore, they are patentably distinct.

Inventions of Groups 1-149 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of treating various conditions that differ with respect to their etiology using distinct product such as antibody, antisense, polypeptide, small molecule and combination agents versus methods of screening differ with respect to the method steps and endpoints. Therefore, they are patentably distinct.

Inventions of Groups 150-157 and Groups 9-16, 35-42, 61-68, 87-94, and 113-120 are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the oligonucleotide as claimed can be used in treating different diseases as claimed or materially different process such as hybridization assays. Therefore, they are patentably distinct.

Inventions of Group 158 and Groups 1-8, 27-34, 53-60, 79-86 and 105-112 are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with

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another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the antibody as claimed can be used in treating different diseases as opposed to its use in screening assays. Therefore, they are patentably distinct.

III. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and/or recognized divergent subject matter. Further, even though in some cases the classification is shared, a different field of search would be required based upon the structurally distinct products recited and the various methods comprising the distinct method steps. Further, a prior art search also requires a literature search. It is an undue burden for the examiner to search more than one invention. Therefore restriction for examination purposes as indicated is proper.

IV. Irrespective of whichever group the applicant may elect, the applicant is further required under 35 U.S.C. 121 to elect:

If Group 26 is elected, the Applicant is required to elect a method of treating **(1) a specific cancer and (2) a specific combination of MARCH antagonist** such as the ones recited in claim 2-4. The method of treating using a composition comprising the specific combination of MARCH antagonists differ with respect to their structures, binding specificity and mode of action. Therefore, they are patentably distinct.

If Group 52 is elected, the Applicant is required to elect a method of treating mental retardation using **(1) a specific combination of MARCH antagonist** such as the ones recited in claim 2-4. The specific combination of MARCH antagonists differ with respect to their structures, binding specificity and mode of action. Therefore, they are patentably distinct.

If Group 78 is elected, the Applicant is required to elect a method of treating thalassemia comprising **(1) a specific combination of MARCH antagonist** such as the ones recited in claim 2-4. The specific combination of MARCH antagonists differ with respect to their structures, binding specificity and mode of action. Therefore, they are patentably distinct.

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If any one of Groups 79-103 is elected, the Applicant is required to elect a method of treating (1) a specific autoimmune disease. The method of treating various autoimmune diseases using distinct MARCH antagonists differ with respect their etiology and therapeutic endpoints.

If Group 104 is elected, the Applicant is required to elect a method of treating **(1) a specific autoimmune disease and (2) a specific combination of MARCH antagonist** such as the ones recited in claim 2-4. The method of treating various autoimmune diseases using distinct MARCH antagonists differ with respect their etiology and therapeutic endpoints. The specific combination of MARCH antagonists differ with respect to their structures, binding specificity and mode of action. Therefore, they are patentably distinct.

If any one of Groups 105-129 is elected, the Applicant is required to elect a method of treating (1) **a specific neurological disease**. The method of treating various neurological diseases using distinct MARCH antagonists differ with respect their etiology and therapeutic endpoints.

If Group 130 is elected, the Applicant is required to elect a method of treating **(1) a specific neurological disease and (2) a specific combination of MARCH antagonist** such as the ones recited in claim 2-4. The method of treating various neurological diseases using distinct MARCH antagonists differ with respect their etiology and therapeutic endpoints. The specific combination of MARCH antagonists differ with respect to their structures, binding specificity and mode of action. Therefore, they are patentably distinct.

- V. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.
- VI. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

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- VII. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).
- VIII. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.
- IX. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.
- X. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the


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process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

XI. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Huynh "NEON" whose telephone number is (571) 272-0846. The examiner can normally be reached Monday through Friday from 9:00 am to 5:30 p.m. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The IFW official Fax number is (571) 273-8300.

XII. Any information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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